

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit	: 1796	Customer No. 035811
Examiner	: Michael L. Leonard	
Serial No.	: 10/586,409	Docket No.: SPL-06-1198
Filed	: July 19, 2006	
Inventors	: Masanori Watanabe	Confirmation No.: 4129
	: Tetsuro Kawashita	
	: Atsushi Morikami	
	: Masaru Kunimura	
	: Kouichi Kashiwagi	
Title	: LIQUID POLYETHERCARBONATEDIOL	
	: COMPOUND AND THERMOPLASTIC	
	: POLYURETHANE OBTAINED THEREFROM	

Dated: April 15, 2010

RESPONSE

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is submitted in response to the Official Action dated October 21, 2009.

Claims 1-20 stand rejected under 35 USC §102 as being anticipated by Tanaka. The Applicants note with appreciation the Examiner's comments with respect to the hypothetical application of Tanaka against Claims 1-20. The Applicants respectfully submit, however, that Tanaka fails to explicitly or implicitly disclose the subject matter in those claims. Reasons are set forth below.

Referring to the comments in the rejection, the Applicants note that they are essentially broken into two portions, one portion directed to the Applicants' use of the transitional phrase "comprising" and the request to show unexpected results. The Applicants will address both of those issues.

First, the Applicants agree that Claim 1 contains a transitional phrase "comprising" in line one. However, with respect to the determination of the presence of polyetherdiol compounds, the Applicants note that the paragraph labeled (2) recites a polyetherdiol compound having oxyalkylene units "consisting of." This means that the polyetherdiol compounds are indeed limited to the ones specified in the claim. Those skilled in the art would not interpret the

claim to be open to additional polyetherdiol compounds based on the use of "comprising" in line one because it would simply not make sense to have those polyetherdiol compounds defined specifically in paragraph (2) by using "consisting of" yet be able to include other polyetherdiol compounds elsewhere in the claim. Thus, the Applicants respectfully submit that Claims 1-20 exclude the disclosed mixture of Tanaka.

With respect to the requested showing of unexpected results, the Applicants submit a Declaration of Mr. Atsushi Morikami, one of the co-inventors herein. Mr. Morikami conducted a series of experiments which takes a variety of examples directly from Tanaka (Experiments 1-3), conducts a variation on one of the examples from Tanaka (Experiment 4) and then conducts a final example that is within the scope of the Applicants' claims (Experiment 5). The results of those experiments are tabulated in Tables 1 and 2. Mr. Morikami focuses on the surprising result obtained with respect to the ultimate elongation as highlighted in Table 2. In that regard, Mr. Morikami demonstrates the unexpectedly large ultimate elongation obtained in Experiment 5 versus those in the other experiments which are directed toward Tanaka. Thus, Mr. Morikami has conducted a series of direct comparisons between the claimed subject matter and Tanaka.

Mr. Morikami's Declaration concludes with a discussion of the results on pages 18-21 of the Declaration wherein he demonstrates the unexpected result obtained by modifying the polyetherdiol of Experiment 3 (taken from Tanaka) by utilizing 1,5-pentanediol in place of 1,6-hexanediol.

The Applicants thus respectfully submit that they have conducted the requested comparison between Tanaka and the Applicants' claimed subject matter and have shown a surprising and unexpected result that confirms that the mixture of the diols of Tanaka is in fact quite different from the mixture of diols as claimed by the Applicants, excluding hexanediol. Withdrawal of the rejection is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



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